REMARKS

Reconsideration of this Application is respectfully requested. Applicants have herein amended independent Claim 1 to more clearly point out aspects of the present invention. Claim 8 is withdrawn without prejudice. Applicants assert that Claims 1-7 and 9-36 are patentable over the cited art of record, which fails to teach or suggest, for example, controlling the power supply voltage of a processor to maintain a substantially stable crosstalk level within the processor.

Specification Objection

Paragraphs 1 and 2 of the above referenced Office Action object to the length of the abstract. Applicants have herein submitted a new abstract in response to the objection.

Claim Objection

Paragraph 3 of the above referenced Office Action objects to a minor informality of Claim 6, line 2. Applicants have herein amended Claim 6 in response to the objection.

35 U.S.C. Section 102 Rejections

Paragraphs 4-5 of the above referenced Office Action rejects independent Claims 1, 9, 17, 25, 33, 35, and 36 as anticipated by U.S.

Patent No. 6,304,824 (hereafter Bausch). Applicants respectfully traverse.

Embodiments of the present invention provide a method and system for dynamically controlling power supply voltage coupled to an integrated circuit to maintain a stable level of crosstalk across a temperature range. By maintaining a stable level of crosstalk, the claimed invention enables an optimum balance of design factors such as increased component density, increased clock speed, and increased heat dissipation to obtain maximum performance. Each of the independent claims explicitly recites regulating the voltage level of an integrated circuit device in order to control a level of crosstalk of the device.

In contrast, the Bausch reference recites a system for measuring a parameter indicative of a channel mobility of an integrated circuit device. The Bausch reference recites a system for adjusting voltage applied to the integrated circuit to modify the "effective channel mobility" such that the "individual channel currents" are substantially constant over a predetermined operating temperature range. Applicants respectfully assert that this is different than controlling, regulating, or otherwise influencing a level of crosstalk within an integrated circuit device. Applicants assert that the Bausch reference is directed specifically towards controlling channel mobility.

Each of the independent claims of the present invention is directed specifically towards controlling crosstalk. The terms "crosstalk" and "channel mobility" are not synonymous. Applicants respectfully submit that channel mobility and crosstalk are separate and distinct phenomena. Accordingly, the Bausch referenced cannot anticipate the present invention as recited in the independent claims.

Specifically, paragraph 5 of the above referenced Office Action states that Bausch teaches "...said regulator controls the power supply voltage to maintain a substantially stable crosstalk level within the processor (col. 3, lines 18-25; col. 5, lines 58-67; col. 6, lines 1-4, and lines 53-62)." Applicants understand these cited sections of Bausch to describe individual channel currents affecting the rise times and fall times of signals within an IC, channel mobility, velocity of the charge carriers, and a temperature dependency of channel mobility. Applicants find no mention of crosstalk, the effects of crosstalk, any need to regulate crosstalk, or the like.

For the above reasons, Applicants respectfully assert that the present invention as explicitly recited in each of the independent claims (e.g., Claims 1, 9, 17, 25, 33, 35, and 36) is not anticipated by Bausch within the meaning of 35 U.S.C Section 102.

35 U.S.C. Section 103 Rejections

Paragraphs 6-7 of the above referenced Office Action states obviousness claim rejections based on Bausch in combination with Hunsdorf (U.S. Patent No. 5,757,172), Bausch in combination with Lee (U.S. Publication No. 20010045779 A1), Bausch in combination with Reinhardt (U.S. Patent No. 5,745,375), Bausch in combination with Brown (U.S. Patent No. 5,568,350), and Bausch in combination with Patel (U.S. Patent No. 6,025,737). Applicants respectfully traverse.

Each above the obviousness rejections relies upon Bausch to show controlling the power supply voltage of a processor to maintain a substantially stable crosstalk level within the processor. In accordance with the rationale described above, Applicants respectfully assert that these limitations are not shown or suggested by Bausch. Furthermore, the deficiencies of Bausch are not cured by any combination of Bausch with Hunsdorf, Lee, Reinhardt, Brown, or Patel. Bausch does not show the controlling or the maintaining of a substantially stable crosstalk level as recited in the independent claims, and there is no suggestion to combine any additional feature from Hunsdorf, Lee, Reinhardt, Brown, or Patel to obtain such functionality.

Accordingly, Applicants respectfully assert the present invention as recited in Claims 1-7 and 9-36 is not rendered obvious by the cited references, alone, or in combination with Bausch, within the meaning of 35 U.S.C. Section 103.

CONCLUSION

All Claims (1-7, 9-36) of the present application are now in condition for allowance. The Examiner is urged to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application. Please charge any additional fees or apply any credits to our PTO deposit account number: 23-0085.

Respectfully submitted,
WAGNER, MURABITO & HAO

Dated: 8/28, 2003

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